1. #include<Servo.h>
2. Servo kova\_a;
3. Servo kova­\_b;
4. Servo kaldir;
5. Servo bos;
6. const byte echo = 13;
7. const byte trig = 12;
8. int sure = 0;
9. int mesafe = 0;
10. int cop = 0;
11. #define Hiz 5
12. #define SolMotorileri 3
13. #define SolMotorGeri 2
14. #define SagMotorileri 7
15. #define SagMotorGeri 4
16. void setup () {
17. Seial.begin (9600);
18. pinMode (SolMotorileri, OUTPUT);
19. pinMode (SolMotorGeri, OUTPUT);
20. pinMode (SagMotorileri, OUTPUT);
21. pinMode (SagMotorGeri, OUTPUT);
22. pinMode (Hiz,OUTPUT);
23. pinMode (echo, INPUT);
24. pinMode (trig, OUTPUT);
25. kova\_a.attach (6);
26. kova\_b.attach (9);
27. kaldir.attach (10);
28. bos.attach (11);
29. kova\_a.write (10); // aç
30. kova\_b.write (100);
31. kaldır.write (160);
32. bos.write (75);
33. delay (1000);
34. analogWrite (Hiz,140);
35. }
36. Void loop() {
37. Kova\_a.write (10); // aç
38. Kova\_b.write (100);
39. Kaldir.write (160);
40. Bos.write (75);
41. int sol\_sensor = analogRead (A1);
42. int sag\_sensor = analogRead (A0);
43. cizgi();
44. bak();
45. if (sol\_sensor < 500 ´´ sag\_sensor < 500)
46. {
47. mesafe = mesafe\_olc();
48. Serial.print ( ´´beyaz zemin engel ariyor mesafe´´); Serial.println(mesafe);
49. if (mesafe < 15)
50. { Serial.printin (´´engel yok tariyor´´);
51. For (int a = 0; a < 200; a++)
52. {
53. Serial print (´´solu tariyor´´); Serial.println (a);
54. digitalWrite (SolMotorileri, HIGH);
55. digitalWrite (Sol MotorGeri, LOW);
56. digitalWrite (SagMotorİleri, LOW);
57. digitalWrite (SagMotorGeri, HIGH);
58. cizgi ();
59. bak ();
60. }
61. For (int a = 0; a < 400; a++)
62. {
63. Serial.print (´´sagi tariyor´´); Serial.println (a);
64. digitalWrite (SolMotorileri, LOW);
65. digitalWrite (SolMotorGeri, HIGH);
66. digitalWrite (SagMotorİleri, HIGH);
67. digitalWrite (SagMotorGeri, LOW);
68. cizgi ();
69. bak ();
70. }
71. For (int a = 0; a < 100; a++)
72. {
73. Serial.print (´´ileri tariyor´´); Serial.println (a);
74. digitalWrite (SolMotorileri, HIGH);
75. digitalWrite (SolMotorGeri, LOW);
76. digitalWrite (SagMotorİleri, HIGH);
77. digitalWrite (SagMotorGeri, LOW);
78. cizgi ();
79. bak ();
80. delay 81);
81. } } } }
82. İnt mesafe\_olc ()
83. {
84. digitalWrite (trig,HIGH);
85. delayMicroseconds (1000);
86. digitalWrite (trig, LOW);
87. sure = pulseIn (echo, HIGH);
88. mesafe = (sure / 2) / 28.5;
89. if (mesafe < 0)
90. {
91. Mesafe = 60;
92. }
93. return mesafe;
94. }
95. void cizgi {}
96. {
97. Serial.println (´´cizgi sorgulandı´´);
98. İnt sol\_sensor = analogRead (A1);
99. İnt sag\_sensor = analogRead (A0);
100. if (sol\_sensor < ´´sag\_sensor > 500) {
101. digitalWrite (SolMotorileri, LOW);
102. digitalWrite (SolMotorGeri, HIGH);
103. digitalWrite (SagMotorileri, LOW);
104. digitalWrite (SagMotorGeri, HIGH);
105. delay (600);
106. digitalWrite (SolMotorileri, HIGH);
107. digitalWrite (SolMotorGeri, LOW);
108. digitalWrite (SagMotorileri, LOW);
109. digitalWrite (SagMotorGeri, HIGH);
110. delay (600);
111. digitalWrite (SolMotorileri, LOW;
112. digitalWrite (SolMotorGeri, LOW);
113. digitalWrite (SagMotorileri, LOW);
114. digitalWrite (SagMotorGeri, LOW);
115. delay (600);
116. }
117. void bak ()
118. { mesafe = mesafe\_olc ();
119. Serial.print (´´ engel sorgulandi´´) Serial.println(mesafe);
120. if (mesafe > 14 ´´ mesafe < 60) // engel var
121. {
122. digitalWrite (SolMotorileri, LOW;
123. digitalWrite (SolMotorGeri, LOW);
124. digitalWrite (SagMotorileri, LOW);
125. digitalWrite (SagMotorGeri, LOW);
126. delay (600);
127. ileri ();
128. if (mesafe > 14 ´´ mesafe < 60) // engel var
129. {
130. digitalWrite (SolMotorileri, LOW;
131. digitalWrite (SolMotorGeri, LOW);
132. digitalWrite (SagMotorileri, LOW);
133. digitalWrite (SagMotorGeri, LOW);
134. delay (600);
135. engel\_var();
136. }
137. }
138. void ileri ()
139. {
140. Serial.print (´´uzakta engel var ´´); Serial.println (mesafe);
141. while (mesafe> 14 V analogRead (A1) < 500 ´´ analogRead (A0) < 500 ´´ mesafe < 60)
142. {
143. Serial.print (´´engel gordu ileri gidiyor engel =´´); Serial.println (mesafe);
144. digitalWrite (SolMotorileri, HIGH);
145. digitalWrite (SolMotorGeri, LOW);
146. digitalWrite (SagMotorİleri, HIGH);
147. digitalWrite (SagMotorGeri, LOW);
148. mesafe = mesafe\_olc ();
149. }
150. }
151. mesafe = mesafe\_olc();
152. Serial.print (´´mesafe = ´´); Serial.println (mesafe);
153. while (mesafe < 9)
154. ( Serial.print (´´engel var geri geliyor mesafe = ´´); Serial.println (mesafe);
155. digitalWrite (SolMotorileri, LOW);
156. digitalWrite (SolMotorGeri, HIGH);
157. digitalWrite (SagMotorileri, LOW);
158. digitalWrite (SagMotorGeri, HIGH);
159. mesafe = mesafe\_olc ();
160. if (mesafe > 14 { loop(); }
161. }
162. while (mesafe > 9 ´´mesafe < 15)
163. {
164. Serial.print (´´engel var ileri geliyor mesafe = ´´); Serial.println (mesafe);
165. digitalWrite (SolMotorileri, HIGH);
166. digitalWrite (SolMotorGeri, LOW);
167. digitalWrite (SagMotorileri, HIGH);
168. digitalWrite (SagMotorGeri, LOW);
169. mesafe = mesafe\_olc ();
170. if (mesafe > 14)
171. {
172. Loop ();
173. }
174. digitalWrite (SolMotorileri, LOW);
175. digitalWrite (SolMotorGeri, LOW);
176. digitalWrite (SagMotorileri, LOW);
177. digitalWrite (SagMotorGeri, LOW);
178. delay (500);
179. digitalWrite (trig,HIGH);
180. delayMicroseconds (1000);
181. digitalWrite (trig, LOW);
182. sure = pulseIn (echo, HIGH);
183. mesafe = (sure / 2) / 28.5;
184. delay (50);
185. if (mesafe < 0)
186. {
187. mesafe =60;
188. }
189. İf (mesafe > 14)
190. {
191. loop();
192. }
193. delay (500);
194. for (int a = 160; a > 16; a--)
195. {
196. kaldir.write(a);//indir digitalWrite(trig, HIGH);
197. delay(20);
198. }
199. delay (1550);
200. kova\_b.write(10); kova\_a.write(100); // kapat sag
201. delay(1550);
202. kaldir.write(160);//kaldir
203. delay(1550);
204. kova\_a.write(20); kova\_b.write(60); aç sol
205. delay(1550);
206. cop++;
207. if (cop ==2)
208. { int sol\_sensor = analogRead (A1);
209. int sag\_sensor = analogRead (A0);
210. While (analogRead (A1) < 500 ´´ analogRead (A0) < 500)
211. {
212. digitalWrite (SolMotorileri, LOW);
213. digitalWrite (SolMotorGeri, HIGH);
214. digitalWrite (SagMotorileri, LOW);
215. digitalWrite (SagMotorGeri, HIGH);
216. delay (5);
217. digitalWrite (SolMotorileri, LOW);
218. digitalWrite (SolMotorGeri, LOW);
219. digitalWrite (SagMotorileri, LOW);
220. digitalWrite (SagMotorGeri, LOW);
221. delay (1);
222. int sol\_sensor = analogRead (A1);
223. int sag\_sensor = analogRead (A0);
224. for (int a = 75; a > 11; a--)
225. {
226. bos.write(a);
227. delay(40);
228. }